

IN THE CLAIMS:

Please amend claims as follows:

1. (currently amended) Disc prosthesis for cervical vertebrae comprising:
 - a first (2) and a second plate (3) intended to be fixed on neighboring cervical vertebrae, and
 - a means of articulation (7) inserted between the two plates placed in superimposed position, characterized in that the means of articulation (7) further comprises:
 - a means authorizing flexion-extension movements in [[the]] a sagittal plane (S) according to an angular clearance limited by a means of stop in flexion-extension (9),
 - a means authorizing lateral inflexion movements in a plane perpendicular to the sagittal plane (S) according to an angular clearance limited by a means of stop in lateral inflexion (12),
 - a means authorizing relative rotation movements between the first (2) and second (3) plates according to an angular clearance limited by a means of stop in relative rotation,
 - a means for assembling [[of assembly]] (17) [[with]] the first (2) and second (3) plates so as to form a prosthesis consisting of a single piece.

2. (currently amended) Disc prosthesis according to claim 1, characterized in that the means of articulation (7) comprises:
 - a hole (20) with a partially spherical profile established inside a chamber (21) prepared in [[a]] the second plate,
 - and a bearing surface (23) with a profile complementary to the hole (20) formed in the [[other]] the first plate and assembled in the hole (20) to be locked in the latter.

3. (currently amended) Disk prosthesis according to claim 1, characterized in that the means authorizing flexion-extension movements [[comprising]] comprises an axis (31) that extends [[extend]] in the sagittal plane (S) by protruding on both sides of [[the]] a bearing surface formed in the first plate, and in [[the]] clearances (32) prepared in the second plate by openings in [[the]] a spherical hole of the second plate.

4. (original) Disk prosthesis according to claim 3, characterized in that the clearances (32) have a determined diameter to enable definition of the angular clearance of the relative rotation movements between the first and second plates.

5. (original) Disk prosthesis according to claim 1, characterized in that the means of stop in relative rotation are formed by a female geometric shape (40) cooperating with a complementary male geometric shape (41), one of the geometric shapes being prepared on the first plate while the second geometric shape is prepared on the second plate.

6. (currently amended) Disk prosthesis according to claim 1, characterized in that the means of stop in lateral inflexion (12) are formed by ~~[[the]]~~ a profile of the plates coming into contact with each other.

7. (currently amended) Prosthesis according to claim 2, characterized in that the bearing surface (23) is prepared in a first insert (25) assembled on the first plate (2) and made in the shape of a stub and that the hole (20) is prepared in ~~[[the]]~~ a second insert (26) assembled on the second plate (3) and made in the shape of a ring.

8. (original) Disk prosthesis according to claim 7, characterized in that the inserts (25, 26) are made of ceramic or metal.

9. (canceled)

10. (new) Disk prosthesis according to claim 2, characterized in that the means authorizing flexion-extension movements comprises an axis (31) that extends in the sagittal plane (S) by protruding on both sides of a bearing surface formed in the first plate, and in clearances (32) prepared in the second plate by openings in a spherical hole of the second plate.

IN THE SPECIFICATION:

Please add the heading "FIELD OF THE INVENTION" prior to line 1 of page 1 of the specification.

Please add the heading "BACKGROUND ART" between lines 5 and 6 of page 1 of the specification.

Please add the heading "SUMMARY OF THE INVENTION" between lines 13 and 14 of page 12 of the specification.

Please add the heading "BRIEF DESCRIPTION OF THE DRAWINGS" before the first line on page 4 of the specification.

Please add the heading "DESCRIPTION OF THE PREFERRED EMBODIMENTS" between lines 23 and 24 of page 4 of the specification.

Please amend the paragraph beginning on line 19 of page 1 as follows:

Therefore, a proposal was made to replace the defective disk with an artificial disk and several types have been considered. For example, in particular US patent US ~~2-562-738~~ 5 562 738, a disk prosthesis for lumbar vertebrae comprising first and second fixation plates to neighbouring vertebrae, made of a metal such as titanium. An articulation knob is inserted between the plates, comprising a first insert assembled on one of the plates and consisting of a spherical cap co-operating with a spherical cup from a second insert assembled on the other plate. The inserts are made of a biocompatible ceramic presenting improved tribology characteristics, in particular as regards the capacity of resistance to wear.

Please amend the paragraph beginning on line 16 of page 7 as follows:

According to a first variant of the invention illustrated in Fig. 1 to 5, the means of articulation 7 comprise an axis 31 crossing the bearing surface 23 from one end to the other by extending in the sagittal plane S. Axis 31 protrudes on both sides of the bearing surface 23 by being engaged in the clearances 32 formed in the ring 26 by opening up in hole 20 [[bearing surface 23]]. The two clearances 32 that extend in a diametrically opposite way present a height, that is, a measurement in the sagittal plan S adapted to allow for flexion-extension movements in the sagittal plane of plate 2 relative to plate 3. The means of stop in flexion-extension are formed by the profile of plates 2, 3, coming into contact with each other.